

## Amendments to the Claims:

1. (Currently amended) A chemical change agent for use as an additive to combustible materials to facilitate complete combustion of a solid fuel, said agent consisting essentially of the following by weight:

<u>A</u> Slack Wax	0-60%.
<u>A</u> Fatty Acid	.5%-10%
Ammonia	.2%-2%
Ammonia like compounds <u>selected from the group consisting of (an Amide, Amines, <u>an</u> Amino Acid and other chemical compounds containing at least one NH<sub>2</sub> function group)</u>	<u>0 – 60%</u>
Water	42%-90%.

2. (Currently amended) A synfuel composition for use as a combustible fuel additive to enhance complete combustion and to reduce NOx in combustion gases, said composition consisting essentially of the following by weight:

<u>A</u> Slack Wax	11%
Stearic Acid	3.5%
<u>An</u> Amide	20%
Ammonia	.5%.
Water	65%.

3. (Currently amended) A chemical composition for use on coal, wood, waste tires and other solid fuels where solid fuels are treated with chemical composition so as to reduce formation of NOx in ~~combination~~ combustion gases, said composition consisting essentially of the following by weight:

<u>A</u> Slack Wax	0-60%
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<u>A Fatty Acid</u>	.5%-10%
Ammonia	.2%-2%
Ammonia like compounds selected from the group consisting of <del>(an</del> Amide, Amines, <u>an</u> Amino Acid and other chemical compounds containing at least one NH <sub>2</sub> , functional group	0-60%
Water	42%-90% <sub>2</sub>

4. (Currently amended) A chemical composition for use as a combustible fuel additive, said composition consisting essentially of the following by weight:

<u>A Slack Wax</u>	11%
<u>A Fatty Acid</u>	3.5%
<u>An Amide</u>	20%
Ammonia	.5%
Water	65% <sub>2</sub>

5. (Currently amended) A chemical composition as in claim 4 wherein said fatty acid is ~~a~~-stearic acid.

6. (Original) A chemical composition as in claim 4 wherein said amide is urea.

7. (Currently amended) A chemical change agent reagent composition for use as a coal treatment to enhance complete combustion and to reduce NO<sub>x</sub> in combustion gases, said composition consisting essentially of the following by weight:

<u>a Hydrocarbon wax</u>	0-60%
<u>a Fatty acid</u>	<del>0</del> 0.5%-10%
Ammonia	<del>0</del> 0.2%-2%
<del>Ammonia like compounds</del> <u>Urea</u>	0-60%

Water

30-~~60~~90%

8. (Currently amended) A chemical change reagent for use as a coal treatment, said reagent consisting essentially of the following by weight:

<u>a</u> Hydrocarbon wax	11%
<u>a</u> Fatty Acid	3.5%
Ammonia	.5%
<u>An</u> Amide	20%
Water	65%

9. (Original) A chemical change reagent as in claim 8 wherein said amide is urea.

10. (Currently amended) A chemical change reagent for use on coal, wood, and waste tires to treat said substances so as to reduce NOx in combustion gases, said reagent consisting essentially of the following by weight:

<u>a</u> Hydrocarbon wax	0-60%
<u>a</u> Fatty acid	0-10%
Ammonia	0-2%
<del>Ammonia like compounds</del> <u>Urea</u>	<del>0</del> 10%-60%
Water	30-90%

11. (Currently amended) A chemical change agent for use on wood, coal and waste tires to treat said substances so as to reduce NOx in combustion gases, said agent consisting essentially of the following by weight:

<u>a</u> Hydrocarbon wax	11%
<u>a</u> Fatty acid	3.5%
Ammonia	.5%

<u>an</u> Amide	20%
Water	65%

12. (Original) A chemical change agent as in claim 11 wherein said amide is urea.
13. (Original) A reagent as in claim 7 and including a percentage of a wetting agent.
14. (Original) A reagent as in claim 13 wherein said wetting agent is used in 0.5% concentrations.
15. (Currently amended) A reagent as in claim 7 ~~and including~~ further comprising 0-10% of Titanium Dioxide.
16. (Currently amended) A reagent as in claim 8 ~~and including~~ further comprising 0-10% Titanium Dioxide.
17. (Currently amended) A reagent as in claim 10 ~~and including~~ further comprising 0-10% Titanium Dioxide.
18. (Currently amended) A reagent as in claim 11 ~~and including~~ further comprising 0-10% Titanium Dioxide.
19. (Currently amended) A chemical composition to be added to another chemical change agent that is compatible with coal and other fuels to promote reduction of NO<sub>x</sub>

in the resultant combustion gases, said composition consisting essentially of the following by weight:

Ammonia	0-2%
Water	30-95%
Ammonia like compounds <u>selected from the group consisting of</u> Amides, Amines, Ammo acid and other chemical compounds which contain at least one NH, NH <sub>2</sub> or NH <sub>3</sub> functional group	0-60%
Titanium Dioxide	0-10%

20. (Currently amended) A composition for adding to coal prior to combustion for lowering the NO<sub>x</sub> emissions, said composition consisting essentially of the following by weight:

Ammonia	0-2%
Wetting Agent	0-5%
Water	30-95%
Ammonia like compounds <u>selected from the group consisting of</u> Amides, Amines, Amino acid And other chemical compounds Which contain at least one NH, NH <sub>2</sub> or NH <sub>3</sub> functional group	<u>0-60%</u>
Titanium Dioxide	0-10%

21. (Currently amended) A chemical composition as in claim 20 having the ingredients in claim 20 comprising 1 to 20 parts and 1-6 parts of the following by weight:

<u>a</u> Hydrocarbon wax	0-60%
<u>a</u> Fatty acid	0-10%
Ammonia	0-2%
Water	30-90%

22. (Currently amended) A method of reducing NOx emissions in the burning of coal, said method comprising

providing an NOx reducing chemical change agent;

adding catalytic compounds to said NOx reducing chemical change agent or to the coal directly before or during combustion, said catalysts being of small particle size;

adding ~~asaid~~ NOx reducing chemical change agent to said coal prior to or during burning, ~~grinding said coal and chemical change agent together to provide for uniform distribution of said agent in said coal.~~

23. (Original) A method as in claim 22 which includes adding a wetting agent to said coal and agent mixture.

24. (Currently amended) A method as in claim 22 wherein said NOx reducing chemical change agent includes an agent selected from the group consisting of Aluminum Silicate, Vanadium Oxide, Tungsten Oxide, Titanium Dioxide, Iron Oxide, other Iron Compounds and a combination of the foregoing.

25. (Original) A method as in claim 22 wherein said coal/agent mixture is ground finely into a dust to promote even distribution.

26. (Currently amended) A method as in claim 22 wherein said NOx reducing chemical change agent is a composition consisting essentially of the following by weight:

<u>a</u> Hydrocarbon wax	0-60%
<u>a</u> Fatty acid	0-10%
Ammonia	0-2%
Ammonia like compounds <u>selected from the group consisting of Amides, Amines, Ammo acid and other chemical compounds which contain at least one NH, NH<sub>2</sub> or NH<sub>3</sub> functional group</u>	0-60%
Water	30-90%

27. (Currently amended) A method as in claim 22 wherein said NOx reducing chemical change agent includes an agent selected from the group consisting of:

Aluminum Silicate  
Vanadium Oxide  
Tungsten Oxide  
Titanium Dioxide  
Iron Oxide as well as other reacted Metalsiron containing compounds,  
~~Iron Compounds~~  
~~Iron-containing Compounds~~  
and combinations or a combination of the foregoing.

28. (Currently amended) A method of reducing NOx in combustible emissions, said method comprising:  
providing a source of combustible material,  
adding a NOx reduction agent or reagent ~~into to~~ said material prior to burning,  
said adding involving distributing said agent or reagent uniformly throughout the combustible material to provide a combustible mixture, burning said mixture  
so as to provide a reduction in NOx from that produced if said combustible material was burned by itself.

29. (Original) A method as in claim 28 wherein said material is coal.

30. (Original) A method as in claim 29 wherein said material is bituminous coal.

31. (Currently amended) A method as in claim 28 wherein said NOx reduction agent consists essentially of the following by weight:

<u>a</u> Hydrocarbon wax	0-60%
<u>a</u> Fatty acid	0-10%
Ammonia	0-2%
<del>Ammonia-like compounds</del> <u>Urea</u>	<del>0</del> <u>10</u> %-60%
Water	30-90%

32. (Currently amended) A method as in claim 28 wherein said NOx reduction reagent consists essentially of the following by weight:

<u>a</u> Hydrocarbon wax	11%
<u>a</u> Fatty acid	3.5%
Ammonia	5%.
<u>an</u> Amide	20%
Water	65%

33. (Currently amended) A method as in ~~claims 4 and~~claim 32 wherein said amide is urea.

34. (Original) A method as in claim 32 wherein said fatty acid is stearic acid.



35. (Currently amended) A method as in ~~claims 4 and~~claim 32 wherein said reagent further comprises ~~includes~~ Titanium Dioxide.

36. (Original) A method as in claim 28 wherein said mixing step includes grinding said material to dust as the reagent is added thereto.

37. (Original) A method as in claim 36 wherein said material is coal.

38. (Currently amended) A method as in claim 28 ~~and including~~further comprising the step of adding a wetting agent to said material prior to addition of said ~~chemical change agent or reagent~~.

39. (Currently amended) A method as in claim ~~38-28~~ wherein said ~~chemical change~~ reagent consists essentially of the following by weight:

Ammonia	0-2%
<u>A</u> Wetting agent	0-5%
Water	30-95%
Ammonia like compounds <u>selected from the group consisting of</u> Amides, Amines, Amino acid and other chemical compounds which contain at least one NH, NH <sub>2</sub> , or NH <sub>3</sub> functional group	<u>0-60%</u>
Titanium Dioxide	0-10%

40. (Currently amended) A method as in claim 39 wherein the reagent ~~has the ingredients comprising~~ comprises 1 to 20 parts and 1-6 parts of the following by weight:

<u>a</u> Hydrocarbon wax	0-60%
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<u>a</u> Fatty acid	0-10%
Ammonia	0-2%
Water	30-90%

41. (Currently amended) A synfuel meeting the requirements of Section 29 of the Internal Revenue Code definition of a "synfuel", said synfuel consisting essentially of coal which has been treated with and which has chemically reacted with a chemical change agent composition consisting essentially of the following by weight:

<u>a</u> Slack wax	11%
<u>a</u> Fatty Acid	3.5%
<u>an</u> Amide	20%
Ammonia	.5%
Water	65% <sub>2</sub>

42. (Original) A synfuel as in claim 41 wherein said Fatty Acid is stearic acid.

43. (Original) A synfuel as in claim 41 wherein said Amide is urea.

44. (Original) A synfuel as in claim 41 wherein said composition also includes a NOx reducing agent for aiding in reducing NOx emissions when said coal is burned.

45. (Currently amended) A synfuel as in claim 44 wherein said NOx reducing agent is selected from the group consisting of:

Aluminum Silicate  
Vanadium Oxide  
Tungsten Oxide  
Titanium Dioxide

Iron Oxide as well as ~~reacted Metals~~ other Iron containing material or compounds that form Iron Oxide in a combustion zone,

~~Iron compounds~~

~~Iron containing compounds~~

and or a combination combinations of the foregoing.

46. (New) A chemical change agent or reagent composition for use as a coal treatment to enhance complete combustion and to reduce NOx in combustion gases, said composition consisting essentially of the following by weight:

A hydrocarbon wax	0-60%
A fatty acid	0-10%
Ammonia	0-2%
Water	30-90%,

wherein the chemical change agent or reagent composition further comprises Titanium Dioxide.

47. (New) A reagent as in claim 7 further comprising Titanium Dioxide.

48. (New) A reagent as in claim 10 further comprising Titanium Dioxide.